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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,849	06/25/2001	Steven Verhaverbeke	004711/P1	4749
32588	7590	03/22/2006	EXAMINER	
APPLIED MATERIALS, INC. 2881 SCOTT BLVD. M/S 2061 SANTA CLARA, CA 95050			MARKOFF, ALEXANDER	
			ART UNIT	PAPER NUMBER
			1746	
DATE MAILED: 03/22/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,849

Applicant(s)

VERHAVERBEKE ET AL.

Examiner

Alexander Markoff

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-16, 18, 19, 22-25, 45, 46, 52 and 208-220 is/are pending in the application.
- 4a) Of the above claim(s) 208-220 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-16, 18, 19, 22-25, 45, 46 and 52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/27/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/27/05 has been entered.

Election/Restrictions

2. The traversal is on the ground(s) that the applicants allegedly amended the claims 208-220 to contain only limitations of previously presented and considered claims was considered. The traversal is not found persuasive because claims 208-220 comprise the limitations, which are not required by previously examined claims and the previously examined claims comprise the limitations, which are not required by claims 208-220.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3, 5-16, 18, 19, 22-25, 45, 46 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

This rejection made in the previous Office action is maintained for the reason of record.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. The rejections made in the previous Office actions are maintained for the reasons of record. These rejections are repeated below.

5. Claims 1-3, 5-11, 15, 18 and 22-25 rejected under 35 U.S.C. 102(b) as being anticipated by Bergman et al (US Patent No 5,235,995).

Bergman et al teach an apparatus as claimed. The apparatus is capable of performing the claimed functions. See entire document, especially Figure 1 and the related description, and columns 8-17.

6. Claims 1-3, 5 8-15, 18, 19 and 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Busnaina (WO 0021692).

Busnaina teaches an apparatus as claimed. See entire document, especially Figures 2, 3 and the related description.

7. The following new rejection is added.

8. Claims 1-3, 5-11, 15, 19, 22-25, 45, 46 and 52 are rejected under 35 U.S.C. 102(e) as being anticipated by Lorimer (Us Patent No 6460,552).

Lorimer teaches an apparatus as claimed. See entire document, especially Figures, 4, 6, 7a and the related description and columns 9-12.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. The rejections made under 35 USC 103 in the previous Office actions are maintained for the reasons of record.

11. Claims 12-14, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorimer in view of Busnaina.

Lorimer teaches an apparatus as claimed except for specific disclosure of the operation frequencies of the ultrasonic transducers and the disclosure of the surface area of the transducers relative to the surface of the wafer.

Busnaina teaches that the claimed frequencies and ratios between the surface of transducers and wafers were known and teach such frequencies and ratios as preferred for providing efficient cleaning.

It would have been obvious to an ordinary artisan at the time the invention was made to provide the apparatus of Lorimer with transducers having frequencies and area as recommended by Busnaina in order to achieve adequate cleaning in a relatively short time.

Response to Arguments

12. Applicant's arguments filed 12/27/05 have been fully considered but they are not persuasive.

The applicants again argue the way the energy is applied in the apparatus. The argument again not found persuasive because the structure of the apparatus of the prior art or modified apparatus of the prior art would be the same as the structure of the claimed apparatus. The apparatus of the prior art or modified apparatus of the prior art would be fully capable of holding the wafer as claimed. The instant claims are directed to the apparatus, not a method. In order to show the difference between the prior art and the invention the claim should be limited by recitation of the structure.

With respect to the rejection made under 35 USC 112(2) the applicants state that they amended the claims to more particularly point and distinctly claim the subject matter of the invention. This is not persuasive because the amendment made does not obviate the deficiency of the claims indicated in the rejection. The rejection is maintained.

New rejections are added.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Markoff whose telephone number is 571-272-1304. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alexander Markoff
Primary Examiner
Art Unit 1746

am

ALEXANDER MARKOFF
PRIMARY EXAMINER